

CLAIMS

What is claimed is:

1. An active noise attenuation system comprising:
a housing having an open end into which air is drawn;
5 a speaker mounted within said housing; and
at least one bracket joined to said housing for attachment to a vehicle structure.
- 10 2. A system according to claim 1 wherein said housing is molded from plastic.
3. A system according to claim 2 including an isolator mounted between said bracket and the vehicle structure.
- 15 4. A system according to claim 1 including an air cleaner housing positioned between said housing for said speaker and an engine wherein said at least one bracket is comprised of a plurality of brackets with at least one of said brackets mounting said air cleaner housing to the vehicle structure and at least one of said brackets mounting said housing for said speaker to the vehicle structure.
- 20 5. A system according to claim 1 wherein said bracket is welded to said housing.

6. A system according to claim 1 wherein said bracket is fastened to said housing.

5 7. A system according to claim 1 wherein bracket is pre-formed and insert molded to said housing.

8. A system according to claim 7 wherein said bracket is snap-fit to said housing.

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9. A system according to claim 1 wherein said at least one bracket is a single bracket body having a plurality of leg mounts extending between said housing and the vehicle structure.

10. A method for mounting an active noise attenuation system to a vehicle structure comprising the steps of:

- (a) providing a generic speaker housing common to multiple vehicle types;
- (b) joining at least one bracket to the housing; and
- 5 (c) attaching the bracket to a vehicle structure.

11. A method according to claim 10 wherein step (a) includes forming the housing from plastic.

10 12. A method according to claim 10 wherein step (b) includes pre-forming the bracket and insert molding the bracket to the housing

13. A method according to claim 10 wherein step (b) includes snap-fitting the bracket to the housing.

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14. A method according to claim 10 wherein step (b) includes welding the bracket to the housing.

15. A method according to claim 10 wherein step (b) includes fastening the
20 bracket to the housing.

16. A method according to claim 10 including the step of mounting an isolator between the bracket and the vehicle structure.

17. A method according to claim 10 including the steps of providing an air cleaner housing, positioning the air cleaner housing between the speaker housing and an engine, joining at least one of the brackets to the air cleaner housing, and joining at least one of the brackets to the speaker housing.

18. An active noise attenuation system comprising:

a generic speaker housing common to multiple vehicle types;

an air cleaner housing positioned between said speaker housing and a vehicle engine;

5 a plurality of brackets for mounting said air cleaner and speaker housings to a vehicle structure wherein at least one of said brackets is joined to said speaker housing and at least one of said brackets is joined to said air cleaner housing; and

a plurality of isolators wherein one of said isolators is mounted between each of said brackets and the vehicle structure.

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19. A system according to claim 18 wherein said speaker housing is formed from plastic.